

WE CLAIM AS OUR INVENTION:

1. An x-ray beam emission window for vacuum tubes and image intensifiers comprising:

a radiation-permeable plate formed by a disc of ceramic material; and

a window frame supporting said plate and adapted for attachment in a wall opening of an evacuated housing, said window frame being composed of a metal compatible with thermal expansion properties of said ceramic material.

2. An x-ray beam emission window as claimed in claim 1 wherein said ceramic material is selected from the group consisting of Al_2O_3 and SiC, and wherein said window frame is composed of a metal having a composition of 27-30 Wt% Ni, 16-24 wt% Co, other < wt%, and a remainder Fe.

3. An x-ray beam emission window as claimed in claim 1 wherein said plate has a metallization thereon and is soldered into said window frame with solder.

4. An x-ray beam emission window as claimed in claim 1 wherein said plate is soldered into said window frame with active solder.

5. An x-ray beam emission window as claimed in claim 1 comprising an auxiliary frame composed of stainless steel and surrounding said window frame and adapted for welding into said wall opening of said evacuated housing.